

REMARKS

Applicant's representative thanks the Examiner for courtesies extended during multiple interviews regarding the subject application.

Claims 1-10, 12-26, 28, 29, and 31-44 are currently pending in the subject application and are presently under consideration. A new listing of the claims is provided at pages 5-12 of the Reply. Claims 1-10, 12-17, and 42-44 have been cancelled without prejudice. Claims 11, 27 and 30 were cancelled in a previous Reply. Applicants' representative reserves the right to prosecute these claims at a later time.

Claims 18-26, 29, 36, and 39-41 have been amended to more clearly recite the invention. New claims 45-59 have been added for consideration. It is believed that no new matter has been added.

It is respectfully requested that the Examiner use Column/Line notation rather than paragraph notation, where the cited reference does not use paragraph numbering. Applicants' representative does not have access to references with paragraph notations as may be provided internally at the Patent Office. For example, see cited reference Smiga *et al.* and Examiner references in Final OA to paragraphs.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 1-10, 12-26, 28, 29, and 31-44 Under 35 U.S.C. §103(a)

Claims 1-10, 12-26, 28, 29, and 31-44 are rejected under 35 U.S.C. §103(a) as being unpatentable over Samuel J. McKelvie *et al.* (Pub. No. 2003/0217096 A1) hereinafter referred to as "McKelvie", and further in view of Brian Smiga *et al.* (US 6,421,678), hereinafter referred to as "Smiga".

Applicants' representative respectfully requests that Examiner withdraw the rejection for at least the following reasons. Neither McKelvie nor Smiga, alone or in combination, teach or suggest applicant's invention as recited in the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) *must teach or suggest all the claim limitations*. See MPEP §706.02(j). The *teaching or suggestion to make the claimed combination* and the reasonable expectation of success *must be found in the prior art and not based on the Applicant's disclosure*. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

McKelvie teaches a network-based messaging system that comprises multiple agents to communicate messages between multiple users in real time using, for example, an XML document synchronization model. Each agent has properties defined in XML and can subscribe to properties of other agents. Each agent can notify other agents which subscribe to it of changes to its properties. The agents communicate using an XML or alternative extensible data interchange protocol. The agents include device agents to represent each of multiple user devices, which may include computers on a wireline network and mobile devices on a wireless network. The agents also include persona agents to represent each user. The persona agents collect information about the properties of other agents and publish the information to other, subscribing agents. Each persona agent comprises properties to maintain state information for each device used by the corresponding user. Most of the agents reside in a centralized agent system.

Smiga teaches a natural language based information organization and collaboration tool for a computer system. Smiga includes an apparatus and method for processing text expressions in a computer system, the apparatus including: 1) relational object database defining an information object with an associated keyword, project, list, contact, data/time event or enclosure; 2) a user input device for receiving an input text expression; 3) a parsing device for identifying the keyword in the input text expression, the parsing device including functions for linking the input text expression to the information object based on the keyword identified in the input text expression; and 4) a user output device for displaying to the user the identity of the information object to which the input text expression was linked. The apparatus further includes supplemental information in the object database which is related to the information object, and the user

output device further includes functions for displaying the supplemental information when a corresponding keyword is identified in the input text expression. The apparatus further includes a method and apparatus for collaboration between users of a time and project management system, natural language-based information organization and collaboration tool for a computer system. Smiga further teaches supplemental information in an object database which is related to the information object, and a user output device that further includes functions for displaying the supplemental information when a corresponding keyword is identified in the input text expression.

In contrast, the subject invention is much more than a messaging architecture as taught in McKelvie and the natural language processing system of Smiga. The instant invention captures, dynamically, context information of a workspace and stores that information in the form of metadata, which is further associated with data (e.g., files, documents, ...). The metadata allows the tracking and capture of user interactions through one or more workspaces.

At a high level, the invention comprises a data management tool that is a unified, horizontal system for communications, organization, information processing, and data storage. The tool is a common workflow layer that can be automated with a scalable, relational database, as well as with an object-oriented storage methodology. The novel architecture operates where the highest contextual assumption is that there exists an entity that consists of one or more users, and first assumes that files are associated with the user.

When a user logs in to a system that employs the tool, the user enters into a personal or user workspace environment. This workspace is called a board, and is associated with a user context. From within this board, the tool makes accessible to the user a suite of applications for creating and manipulating data. Any user operating within any board has access to the suite of applications associated with that board, and can obtain access to any data in any form (e.g., documents and files) created by the applications and to which he or she has permission. Context information associated with the workspace is automatically stored in the database as metadata, and the metadata is further associated with data that is created in the workspace. Accordingly, any data created by the user in the workspace can be searched via the metadata.

Moreover, thereafter, the user can then move (or login) to a different workspace, such as a shared workspace (or shared board) that accommodates multiple users, for example, and the user can then access the same data created by the user in the first workspace and/or new data that was created in the shared workspace. The fact that the user is now in the shared workspace, and that s/he accessed the same data created in the personal (or first) workspace, is recorded as additional information stored in the metadata of the same data created in the personal workspace. Thus, the metadata is a means of accumulating a history of all interaction information for any piece of data. As there can be millions of data files or documents stored on a storage medium, this corresponding metadata for each of the millions of data files or document is the means by which the data can be searched. By searching the metadata, the user can retrieve, for example, all data created by User A in Workspace (or Board) B.

A web refers to a collection of interrelated boards (or workspaces), and the web represents the relationships between multiple boards. The concept of boards and webs is used to automate workflow processes and define relationships between data and applications, for example. Thus, data generated by applications is associated with an individual, group of individuals, and topical content, and not simply with a folder, as in traditional systems. Again, this context information of the single workspace and/or shared workspaces and any movement of a user or users between the workspaces is automatically captured and stored in the metadata, and the metadata is further associated with data that is created in the workspaces.

As amended, independent claim 18 recites a computer-implemented context component for capturing context information associated with user-defined topic data created by a user in a first context *of the network-based system* and *dynamically associating the context information with the data via metadata that is stored* on the network-based system, and a computer-implemented *tracking component of the network-based system for tracking a change of the user from the first context to a second context of the network-based system and automatically associating at least a portion of the context information with the second context in the metadata.*

McKelvie does not teach or suggest such recited limitations. With respect to the claimed tracking limitation, the Examiner references paragraphs ([0132] and [0407]) in

McKelvie. However, paragraph [0132] indicates use of an RTMP communications protocol for agent-to-agent conversation, by allowing all messages and contracts between any two agent servers to be carried over a single transport connection, regardless of the number of agents involved. With respect to paragraph [0407], McKelvie appears to teach application of the agent-based system and data synchronization to content distribution such that an agent can represent the state of a content element, such as a stock quote, sports score, HTML document or file. When the content changes, subscribing agents would be notified. The publishing agent may also send alerts containing transient information to be displayed to the user (for example, a home run screen or sound).

Accordingly, McKelvie does not teach the claimed limitations, and thus, this rejection should be withdrawn.

Moreover, McKelvie does not teach or suggest the concepts of a board (or workspace), a web, and/or collections of boards (or workspaces) and webs as recited in the claims and described in the specification, and other limitations of claims 19-25 that depend from claim 18.

For example, amended claim 20 recites *the context component is associated with a web, which web is a collection of interrelated workspaces, the web maintains a location of data of the respective interrelated workspaces when one or more of the interrelated workspaces are moved into a different workspaces interrelationship.* The Examiner references paragraphs [0040], [0056], and [0132] of McKelvie.

Paragraph [0040] appears to describe a general network of wired and wireless devices and systems (e.g., a server, a PC, a proxy gateway, and wireless devices), and teaches nothing of workspaces (or boards).

Paragraph [0056] appears to teach about messaging between agents. To wit, “every message in the system has a standard protocol wrapper consisting of a message header and a body. Except for response messages, the message header always specifies the destination agent and, if the agents are communicating over an established contract, the contract identifier (ID) assigned by the destination agent. Response messages only require an item ID for routing and do not require a destination agent or contract ID. The receiving agent can use the contract ID to look up the source agent, so no source agent URI is needed unless the agents are establishing a contract or are communicating without

a contract.” This does not teach about interrelated workspaces and aspects of webs, as claimed. Paragraph [0132] of McKelvie, as indicated above, teaches use of an RTMP communications protocol for agent-to-agent conversation, by allowing all messages and contracts between any two agent servers to be carried over a single transport connection, regardless of the number of agents involved. Again, this teaches nothing of the recited limitation in claim 20.

Claim 21 recites *the context information includes a relationship between the user and at least one of an application, application data, and user environment.*

Contrariwise, as referenced in the Office Action at paragraph [0129] of McKelvie, appears to teach of handling a contract for messages between agents. McKelvie does not teach of a relationship between the user and at least one of an application, application data, and user environment.

With respect to claims 22 and 23, paragraph [0040] of McKelvie is referenced. However, as indicated by the brief description of paragraph [0040] above, McKelvie teaches nothing about the limitations recited in these claims.

Accordingly, it is requested that claim 18 and the claims 19-25 that depend therefrom be allowed.

Amended independent claim 26 recites, in part “...creating data within a user environment of a web-based computing platform using an application, the data in the form of at least files and documents...”, “*dynamically associating metadata with the data, the data and metadata stored on the web-based computing platform, the metadata includes information related to a user of the user environment, to the data, to the application, and to the user environment*”, “tracking movement of the user from the user environment of the web-based computing platform to a second user environment of the web-based computing platform”, and “dynamically associating in the metadata at least one of the data and the application with the second user environment such that the user employs the at least one of the application and data from the second environment.

McKelvie does not teach or suggest including in the metadata information related to a user of the user environment. Moreover, McKelvie does not teach or suggest dynamically associating metadata with the data, or associating in the metadata at least one of the data and the application with the second user environment. Additionally,

McKelvie does not teach or suggest tracking movement of the user between environments of the same computing platform. Moreover, as recited in additional limitations, McKelvie does not teach or suggest “associating at least one of the data and the application with the second user environment such that the user employs the at least one of the application and data from the second environment.”

Smiga fails to make up for the aforementioned deficiencies of McKelvie with respect to these independent claims. Accordingly, there would have been no motivation to modify the teachings of McKelvie with the teachings of Smiga. Moreover, the references themselves do not provide a requisite basis for suggesting or motivating the Examiner’s purported combination. Applicants’ representative requests that this claim and claims 28, 29 and 31-35 that depend therefrom be allowed.

With respect to amended independent claim 36, the subject claim recites, in part, acts of “*ordering two or more of the user environments according to different arrangements of the user environments*”, and “*traversing the different arrangements of the user environments with one or more of the applications to locate the data associated therewith*.”

McKelvie does not teach or suggest an act of ordering. Additionally, McKelvie does not teach the concept of “arrangements” or “collections” as described in the subject description. The Examiner references paragraph [0040] of McKelvie in support of this rejection. As before, paragraph [0040] appears to describe a general network of wired and wireless devices and systems (e.g., a server, a PC, a proxy gateway, and wireless devices), and neither teaches nor suggests anything related to *ordering two or more of the user environments according to different arrangements of the user environments* and *traversing the different arrangements of the user environments with one or more applications to locate the data associated therewith*.

The rejection of dependent claim 37 is also based on information in paragraph [0040] of McKelvie, which teaches nothing related to the claimed limitation of using traversal information to locate data associated with a given user environment. Accordingly, this rejection should be withdrawn.

Claim 38 depends from claim 37, and further clarifies the traversal information as including a *collection ID*, a *user environment*, and a *routing path to the location of the*

environment data. McKelvie does not teach or suggest use of such aspect. Accordingly, claims 36 and 37-39 that depend therefrom, should be allowed.

Independent claims 40 and 41, as amended, recite limitations similar to what has been addressed *supra*. McKelvie neither teaches nor suggests such limitations. Further, Smiga, as combined, does not make up for the deficiencies of McKelvie. Thus, it is respectfully requested that the rejection for these claims be withdrawn.

New independent claim 45 recites limitations not taught or suggested by McKelvie alone, or in combination with Smiga.

In view of at least the forgoing, it is respectfully submitted that McKelvie alone does not teach or suggest applicants' claimed invention as recited in independent claims 18, 26, 36, 40, 41 and 45 (and dependent claims 19-25, 28-29, 31-35, 37-39, and 46-59). Accordingly, it is respectfully submitted that the subject invention is not anticipated by McKelvie, and is not obvious in view of Smiga, and therefore, these claims should be allowed.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-3663 (LEADP102USA). Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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